# 1. Concurrent programming (Part II)

Nelma Moreira & José Proença

Concurrent programming (CC3040) 2023/2024

CISTER - U.Porto, Porto, Portugal

 $\verb|https://fm-dcc.github.io/pc2324|$ 







# Contents of this module

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## Blocks of sequential code running concurrently and sharing memory:

- What is Scala and why using it?
- Concurrency in Java and its memory model
- Basic concurrency blocks and libraries
- Futures and promises
- Actor model (maybe)

#### We will be less formal

- focus on concepts and programs
- study operators and libraries
- tool support with **Scala**

### We will have hands-on

- Practical programming exercises
- Apply the concepts we learn

# Logistics

### **Useful information**



Relevant class material and announcements will be posted on the website periodically

https://fm-dcc.github.io/pc2324

#### Lecturers

- Nelma Moreira https://www.dcc.fc.up.pt/~nam/
- nelma.moreira@fc.up.pt
- office hours: tbd

- José Proença https://jose.proenca.org
- jose.proenca@fc.up.pt
- office hours: Thursday afternoon

(Please send an email the day before if you wish to meet)

# **Grading**



## Grading will consist of:

- 40% (T1) individual test for part  $1 (\geq 6)$
- 30% (T2) individual test for part 2 ( $\geq$  6)
- **70%** (FE) individual final exam for parts 1 and 2
- **30%** (**CW**) **course work** for parts 1 and 2
  - groups of at most 2 students
  - **10%** for part 1
  - **20%** for part 2

### Normal period

$$71 \times 0.3 + 72 \times 0.4 + CW \times 0.3 \ (\ge 9.5)$$

Mandatory 25% attendance in PL

## Extra period (recurso)

$$FE \times 0.7 + CW \times 0.3 \quad (\geq 9.5)$$